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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,173	03/10/2004	Christian Dachauer	004640-044	3507

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EXAMINER	
LU, JIPING	

ART UNIT	PAPER NUMBER
3749	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/796,173	DACHAUER ET AL.	
	Examiner	Art Unit	
	Jiping Lu	3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29, 31-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14* is/are allowed.

6)☒ Claim(s) *1-13, 15-29, 31-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-29 and 31-43 are allowed. Claim 30 is canceled.

Claim Rejections - 35 USC § 112

2. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 15 recites the broad recitation of an area of bottom-side product passages, and the claim also recites essentially opposite of the metal sheet which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-13, 16-29, 31, 33-43 are rejected under 35 U.S.C. 103 as unpatentable over Petersen (U. S. Pat. 5,133,137) in view of Tanaka et al (U. S. Pat. 5,264,196) or Ziegler (U. S. Pat. 3,869,256).

Petersen shows a fluidized bed continuous thermal treatment of granular bulk material same as the broad claims. Petersen's device includes a product inlet 12, 24, 25 in a first chamber 13, a product outlet 23 in the last chamber 14 downstream from the first chamber 13 and several fluidization chambers (at 14, 17, 55) with several gas permeable sieve bottom 16, 17. The gas 18, 19 is injected into respective chamber 13, 14, to fluidize the granulate and exited in a roof area 20 of the device. Adjacent chambers are separated by separating walls 15. For claim 6, see openings 22. For claim 10, see 22a. However, the device of Petersen does not show a zigzag separator. Patent to Tanaka et al or Ziegler shows a zigzag alternating granulate path (up and down) same as the applicant's. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the fluidized bed of Petersen with a zigzag separating walls as taught by Tanaka et al or Ziegler in order to provide a serpentine path of granulate for better exchange. With regard to the claimed the granulate size, chamber shape and type of bulk material, it would have been an obvious matter of design choice to design the choose the size of the granular particle and the shape of the chamber with any desired size and shape in order to obtain the optimum result since applicant has not disclosed that the claimed size and shape solves any stated problem in a new or unexpected way or is for any particular purpose

which is unobvious to one of ordinary skill in the art and it appears that the claimed feature does not distinguish the invention over similar features in the prior art . For claims 41-43, to use the device of Petersen for treating PET or polymer granulate is deemed to be an obvious matter of uses.

3. Claims 1-13, 16-29, 31, 33-43 are rejected under 35 U.S.C. 103 as unpatentable over Brassert et al. (U. S. Pat. 2,316,664) in view of Tanaka et al (U. S. Pat. 5,264,196) or Ziegler (U. S. Pat. 3,869,256).

Brasssert et al show a fluidized bed continuous thermal treatment of granular bulk material same as the broad claims. Brassert's device includes a product inlet 4 in a first chamber (between 132 and 102), a product outlet 72 in the last chamber (near 78) downstream from the first chamber and several fluidization chambers with several gas permeable sieve bottom. The gas 22 is injected into respective chambers to fluidize the granulate and exited in a roof area 60 of the device. Adjacent chambers are separated by separating walls 132. However, the device of Brassert et al does not show a zigzag separator. Patent to Tanaka et al or Ziegler shows a zigzag alternating granulate path (up and down) same as the applicant's. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the fluidized bed of Brassert et al with a zigzag separating walls as taught by Tanaka et al or Ziegler in order to provide a serpentine path of granulate for better heat exchange. With regard to the claimed the granulate size, chamber shape and type of bulk material, it would have been an obvious matter of design choice to design the choose the size of the granular particle and the shape of the chamber with any desired size and shape in order to obtain the optimum result since applicant has not disclosed that the claimed size and shape solves any stated problem in a new or

unexpected way or is for any particular purpose which is unobvious to one of ordinary skill in the art and it appears that the claimed feature does not distinguish the invention over similar features in the prior art . For claims 41-43, to use the device of Brassert et al. for treating PET or polymer granulate is deemed to be an obvious matter of uses.

4. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen (U. S. Pat. 5,133,137) or Brassert et al. (U. S. Pat. 2,316,664) in view of Tanaka et al (U. S. Pat. 5,264,196) or Ziegler (U. S. Pat. 3,869,256) as applied to claim 1 as above, and further in view of Sanderson (U. S. Pat. 3,360,867).

The device of Petersen or Brasssert et al. as modified by Tanaka et al or Ziegler as above includes all that is recited in claim 32 except for the pivotable gate. Sanderson teaches a fluidized bed device with pivotable gate 40 same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further provide the device of Petersen or Brassert et al. with a pivotable gate as taught by Sanderson in order to control the product discharge.

Allowable Subject Matter

5. Claim 14 is allowed.

6. Claim 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 2/4/2005 have been fully considered but they are not persuasive to overcome the rejection. First broad claims presented failed to structurally define over the prior art references as applied. Please point out from the claims exactly which element is not shown or teach by the prior art references. Second, the applicant has argued that the patents to Tanaka et al and Ziegler do not show a zigzag separator as claimed by the newly amended claims. The examiner disagrees. The patents Tanaka et al and Ziegler both show a zigzag alternating granulate path (up and down) and functioned same as the applicant's. The zigzag separators of Tanaka et al and Ziegler are disposed in a roof area of the device between the fluidized layer and a fluidization gas vent. Therefore, it is the examiner's position that one skilled in the art in view of the combined teachings of the references would be able to derive the broadly claimed invention by providing the fluidized bed of Petersen (USP 5133137) and Brassert et al (USP 2316664) with a zigzag separating walls disposed in a roof area between the fluidized layer and a fluidization gas vent in order to provide a serpentine path of granulate for better heat exchange.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 571 272-4877. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jiping Lu
Primary Examiner
Art Unit 3749

J. L.